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Why Is Active Learning So Difficult To Implement: The Turkish Case

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Abstract: This article aims to report how teacher education may promote active learning which is demanded by the current educational reform of Turkish teacher education (TE). This article also examines the effectiveness of the recent reforms in Turkey from a student's perspective, and provides an understanding of the concept of active learning, how it is applied and what the obstacles are to achieving it. The data were collected through open-ended questions on an electronic platform. Student teachers ($n = 316$) in the Faculty of Education at Erciyes University responded to the questions. The data were analysed qualitatively through content analysis. The results clearly indicated a big gap between the formal and applied curricula in the Faculty of Education. Many indicators of active learning can be observed, but there are still many obstacles to be overcome.

Key words: Active Learning, Teacher Education, Students' Attitudes

Introduction

Turkey has been known for its achievements in educational reform over the past three decades. The radical changes occurred in education programs due to the national education reform in 2005 (Aksit, 2007). These reforms modified the content and practices of programs by emphasising student-centred learning and a constructivist approach toward learning. Thus, a new framework of flexible educational programs aiming to enhance pluralism, originality and differences in learning has started to replace the traditional educational approach designed to teach adaptation and compliance. Following the new approach, based on the idea that the learner constructs knowledge, teachers had to take on additional roles of guiding and facilitating learning so it could become active learning. The new education programs are based on constructivism, and cooperative and active learning, and pay attention to individual differences in learning. In this context, a teacher has become one of the most important factors in all types of educational reforms in schools. These reforms have also strongly influenced teacher education (TE). Since 2005, a constructivist approach in teacher education has started to play a greater role in Turkey (Aksit, 2007).

Furthermore, Kimonen and Nevalainen (2005) emphasised that curriculum reform alone was not always sufficient to alter and modify the teachers' significance and practices, and what was needed were changes in the beliefs, habits, roles and power structures of teaching as well as developments in pedagogy. Such a radical change also requires new principles and practices in TE. The processes of radical change must be analysed to understand if curriculum reform has been transferred effectively to TE culture. Therefore, this

article reports how TE may promote active learning that is perceived as a radical change and is demanded by the current educational reforms in Turkish TE.

This analysis applies the categories established in the study by Niemi (2002), when the author researched active learning in the Finnish TE system. The study provided a critical analysis of several dimensions of the concept of active learning: definitions, interpretations, main obstacles to be overcome and student teachers' suggestions for further development.

Active Learning

Active learning has received considerable attention over the years. Often presented as a radical change from traditional instruction, active learning has attracted strong advocates in faculties looking for alternatives to traditional teaching methods, although some faculties are sceptical and see active learning as one more in a long line of educational fads (Prince, 2004, p223).

Recent studies of learning recognise different approaches that emphasise student activity. In the modern psychology of learning, many concepts have the same purpose, even though they originate from different theoretical frameworks. Examples of these concepts of learning are authentic, self-directed, self-regulated, independent, autonomous, problem-solving, cooperative, inquiry-based and active learning. Their common feature is a student's active impact on learning and a student's involvement in the learning process, allowing students to focus on creating knowledge with an emphasis on such skills as analytical thinking, problem-solving and meta-cognitive activities that develop students' thinking (Niemi, 2002; Lavonen, 2008; Rotgans & Schmidt, 2011; Niemi & Nevgi, 2014).

Large bodies of evidence from different fields support the effectiveness of active learning. However, there are only a few studies about its effects on changing educational culture; for instance, studies by Niemi (2002) and Kimonen and Nevalainen (2005) have focused on active learning as a change in educational culture. Both studies indicated that schools and TE departments were in the middle of a cultural change, which caused difficulties because implementing new ideas required a change in teachers' ways of thinking and working. Niemi (2002) researched active learning in schools and TE, and found that many factors were obstacles to active learning, such as: teaching methods which make student teachers passive; incompetent educators of student teachers; lack of time and time pressure in studying; separation of theoretical and practical studies; student teachers' own passivity and lack of metacognitive skills. Also, Niemi (2002) mentioned that the heavy preparatory work, curriculum, lack of time, size of student groups, and poor learning conditions and materials were the important obstacles to educators' use of active learning methods. Niemi (2002, 2012) proposed that TE culture should provide more active learning experiences to prepare teachers to use these methods with their students in schools.

In their study, Kimonen and Nevalainen (2005) reported that the teacher's learning process and the development of the school are closely related. Transformation of the traditional school context requires the teacher to reflect critically on his/her own principles and practices of action and to transform them; in other words, to create a new school context. Similarly, Bates and Townsend (2007) noted that the transformation of schools depends on the transformation of teachers. The transformation of teachers depends on the transformation of TE. Such changes in the context of teacher education can be expected to have significant effects on the preparation of teachers. The professional pedagogical preparation of teachers has significant effects on student learning, especially on tasks requiring higher-order thinking and problem-solving. Furthermore, measures of pedagogical knowledge, including knowledge of learning, teaching methods and curriculum, are more frequently found to

influence teaching performance and often exert even stronger effects than subject-matter knowledge (Darling-Hammond, 2000). Moreover, the evidence is quite clear that a focus on the pedagogical aspects of learning and teaching by emphasizing ‘life-long learning’ and ‘productive pedagogies’ (Bates & Townsend, 2007) pays significant dividends in teacher preparation and teacher effectiveness. However, according to Bates and Townsend (2007), it is very difficult to change the culture of TE. In Turkey in 2005, a major reform started in higher education, including TE. It was a paradigm shift from a focus on teaching to a focus on learning. The new programs were based on the idea of constructivism and learners who must construct and reconstruct knowledge to learn effectively. This article analyses how Turkish TE programs are promoting active learning in the 10 years after the realisation of the 2005 reform.

Research Questions

- The purpose of this study is to develop clear answers to the following questions:
- How have student teachers defined active learning and how do they see its meaning in their studies that have been provided with TE programs?
 - What kinds of obstacles to active learning are pointed out by student teachers?
 - What suggestions do student teachers make for Turkish TE and the support they should be given to meet the current challenges?

Method

Data Collection and Samples

The data were collected through electronic questionnaires completed by student teachers ($N = 316$, of whom 40.6% were males and 59.4% were females) of the Faculty of Education at Erciyes University in 2014. The electronic questionnaire consisted of questions on subjects’ demographic background and three open-ended questions. The open-ended questions focused on student teachers’ experiences as active learners during their TE studies and on their perceptions of obstacles to active learning in TE. The questions were derived from an earlier study conducted by Niemi (2002). For the demographic background information, students were asked to report their university, TE program, gender, age and a major or a large minority of their study program (Table 1).

Student teachers	Scale	f	%
	Total	316	100.0
Sex	Males	127	40.6
	Females	186	59.4
Age	<25 years	291	93.0
	25–34 years	22	7.0
Study year	1 st year	18	5.8
	2 nd year	7	2.2
	3 rd year	184	58.8
	4 th year	104	33.2
TE program	Class teacher	78	24.9
	Subject teacher	235	75.1

Table 1: The demographic background of respondents

Data Analysis

In this study, a two-stage approach was applied in the analysis.

The first stage: The Turkish data were analysed using the categories found in the earlier study (Niemi, 2002) that focussed on the question of what active learning was in TE and what the barriers to such learning were in the Finnish context. That study found four categories of student experiences of active learning in TE: (1) clarification of a teacher's role; (2) encouragement to experiment with new methods; (3) social component of active learning; and (4) active learning as ownership of learning. That study identified five main categories of obstacles to active learning: (1) teaching methods which make student teachers passive; (2) incompetent educators of teachers; (3) lack of time and time pressure in studies; (4) too-separate theoretical and practical studies; and (5) student teachers' own passivity (Niemi, 2002). When the Turkish data were interpreted, findings were deduced by using these categories as lenses. The data were not forced to conform to the earlier themes if new issues emerged from the Turkish context. However, almost all categories could be found, with few exceptions. The purpose was not compare Finnish and Turkish TE. The aim was to begin with the grounds found earlier and then continue to analyse the data more inductively in the Turkish context.

The second stage: Under the broad main categories, the Turkish data were analysed inductively to acquire a deeper understanding of the concept of active learning. The Turkish author analysed what subcategories were in each main category. The purpose was to reveal Turkish student teachers' concepts and experiences as closely as possible to their expressions.

This analysis complementing the earlier study (Niemi, 2002) helped to ensure the quality of the content analysis, especially the validity, the generalisability and the theoretical level of theory building from case-study research (Kohlbacher, 2006). In this way, we were confident that we were not forcing data into predetermined categories, but that we were benefitting from the study by Niemi (2002) as a conceptual framework that enhanced our knowledge and understanding of the issues under investigation.

Results

Student Teachers' Experiences of Active Learning

Almost all students mentioned that they had experiences of active learning in TE. According to the analysis of qualitative data, five important categories were revealed. Students described the meaning of active learning in TE (Table 2):

Active learning is an improvement of their professional identity
Active learning is an encouragement to experiment with new methods
Active learning is a reinforcement of students' self-esteem
Active learning is an experience in cooperative learning culture
Active learning is an ownership of learning

Table 2: Categories of the meaning of active learning as given by students in qualitative analysis

Active learning is an improvement of their professional identity. Most students mentioned that active learning fundamentally changed their personal views and images of teaching. It opened up to them significant new perspectives on their profession and helped them get to know their role better as a teacher. Some students found that they were more than just active students in the practical courses. At times, they learned to feel and act as teachers.

Therefore, two different subcategories were determined in the data: *'feel as a teacher'* and *'act as a teacher'*. Some examples of students' opinions are described as follows:

*'During the Practical Courses I felt like a teacher in the real sense',
'We were really active during the courses we planned and delivered lessons ourselves that we have selected from the curriculum. That was when we gained experience as a teacher'.*

"Feel as a teacher" is linked with professional identity from the point of view of the intellectual and the emotional. It includes self-efficacy and self-awareness, and mediation among ideals, aims and school realities. "Act as a teacher" entails integrating thoughts, knowledge and dispositions in practices that are informed by consistent principles.

This study found that active learning allowed students to develop their professional identity and raised awareness of new teacher roles, such as teaching facilitators and co-participants in the learning process.

Active learning is an encouragement to experiment with new methods. Most of the students told of active learning as being an instructional method that engaged them in the learning process and gave them the chance to learn active learning methods as well as to achieve the goals of the lesson. Students emphasised that active learning allowed them to learn from their own experiences and to match a wide range of teaching and learning strategies to the needs of the learners, as some students described:

*'This approach made me realize how I should guide the active learning process in my own class in the future more effectively and made me assimilate it better',
'The active learning methods enabled us to experience the advantages and disadvantages of each method by ourselves'.*

Active learning is a reinforcement of students' self-esteem. Some students emphasised that active learning raised their self-esteem because of its supportive and democratic learning environment. For example, some students made the following statements:

*'No students are left behind in active learning, which is a supportive learning environment',
'Active learning is an approach through which we can experience a sense of achievement as individuals and/or as a group',
'Community Service Applications, School Experience and Training Practices were lessons where we had the chance to demonstrate our abilities',
'Active learning experiences give us self-confidence and help us to express ourselves in a comfortable learning environment; they encourage us and put us in the centre of the learning process'.*

To maximise learning, every student needs to have a sense of identity and a comfortable learning environment. Unlike the traditional lecture format, active learning methods provide a much more democratic environment and more cooperation between teachers as well as with students.

Active learning is an experience in cooperative learning culture. Most students emphasised that peer learning — moving from independent to interdependent — is mutually

beneficial for themselves and the rest of the group because it involved sharing knowledge, ideas and experience. They also mentioned that they developed skills in organising and planning learning activities, working collaboratively with others, giving and receiving feedback, and evaluating their own learning. Students reported many positive experiences about the cooperative learning culture; for example:

'I felt active while applying different methods and techniques as a group during the Special Teaching Methods Course, because I had a mission shared by everyone else in the group',

'Active learning is a model that supports the individual and the group work. In this way, I can realize my contribution to both myself and my colleagues',

'I felt that I was an active student, especially when we worked on group assignments and when we discussed how to take homework further and to find original, creative ideas'.

Active learning is an ownership of learning. Almost all students mentioned that practical courses were an important active learning experience for them. These courses consisted of practical education lessons constructed as student-centred activities, such as drama, laboratory, fieldwork, preparing a portfolio, conducting research, having peer discussions, giving feedback to peers and evaluating themselves, etc. The common feature of these activities was a feeling of ownership. Students valued the ability to apply theory to practical teaching and learning, which requires the students to engage in the learning process and take responsibility for their own learning instead of passively listening to the teacher. Students made the following statements:

'In the active learning implementation, we learned to teach how to fish rather than to give fish',

'I think I've learned in the real sense during the laboratory courses when I conducted experiments, observed and evaluated the results by myself',

'Designing our own teaching materials provided us with professional development'.

Most student teachers mentioned that they experienced being very active learners in the practical education lessons and the practical courses in different subjects, in which students could personally participate, apply teaching techniques and make presentations. Student teachers valued the ability to apply knowledge to teaching and learning, which required their own engagement and commitment. The more that students became active partners in the learning process, the more they took ownership of the course and of their learning.

According to the answers of the student teachers, they felt that they were active when they engaged practical activities and directly participated in the learning process, such as making a presentation, special teaching methods, drama, laboratory and scientific research methods courses. Some student teachers mentioned that they enjoyed having the freedom to act like a teacher in the practical education lessons. Implementing active learning allowed them to learn from their own experiences. It can be concluded that students felt active when they engaged in practical activities and directly participated in the learning process.

Obstacles to Active Learning in TE

Although students had experienced active learning during their TE program, they strongly criticised much of their education. The main reason for the criticism was their incompetent educators. Other specific obstacles associated with active learning included the following: limited class time, the density of the curriculum, the potential difficulty of using active learning in large classes, the lack of materials, equipment or resources, and the conservative attitudes of fellow students who did not like taking part in active learning methods. The six main categories of students' experiences with obstacles to active learning are in Table 3:

<i>Incompetent teacher educators</i>
<i>Overcrowded classrooms</i>
<i>Lack of time and time pressure in the studies</i>
<i>Lack of necessary materials, equipment or funds</i>
<i>Student teachers' own passivity</i>
<i>Examination system (still based on memorizing)</i>

Table 3: Categories of obstacles to active learning as seen by students in the qualitative analysis

Incompetent educators. In the study, students mentioned incompetent educators as the greatest barrier of all and they criticised many of their educators. The main reason for the criticism of educators was their '*continuing the traditional approach (rote learning)*' in their lecturing. Students also made many critical comments, suggesting that educators '*fear about losing of control over the class*', '*lack self-confidence*', '*do not have sufficient skills*', '*have (mis)perceptions about the class management (they believe that active learning causes too much noise, which shows bad class management)*', '*constantly focus on theoretical knowledge, instead of practical application*', '*show resistance to change (do not follow the reform, they do what they have been accustomed to do)*', and '*focus only on students' academic success (metacognitive achievement)*'.

Overcrowded classrooms. Most students emphasised that the size of student groups was too big. The serious problem seemed to be because educators did not have enough time or the space to support students' work in active learning environments. Students made the following statements:

'It is almost impossible to use active learning methods in our class because it has 70 students',
'Working with very large groups is very hard for both students and teachers',
'It's hard to manage discussions in crowded classrooms',
'The physical conditions of the class are inadequate for putting students into groups because of the inflexibility problems'.

Another important obstacle to using active learning methods seemed to be the inappropriate physical conditions of the class. Most students complained that the '*classes are inflexible*' since they had stationary tables and desks.

Lack of time and time pressure in the studies. Almost all students were worried about the stress of time. They emphasised that the courses were overloaded, that they were working under time pressure, that the use of active learning increased the required amount of time, and sometimes (especially in theoretical lessons) lecturing was an easier and more

efficient means of transmitting information. Most students stated that the biggest obstacles were as follows:

'Overloaded curriculum'; 'too heavy a workload'; 'time consuming for both sides (students and educators)'; 'the lack of time; 'the lack of motivation among students or not being accustomed to work as a group was too time consuming'.

Lack of necessary materials, equipment or resources. Most students complained about the lack of materials or equipment. This could be a barrier to the implementation of some activities that involve active learning (for example, demonstration and laboratory exercises, or computer and visual-based instructional activities), but certainly not to all. A few students also mentioned that *'some of the methods require little expense such as pen and paper'*. For example, asking students to summarise the material they have read or forming pairs to evaluate statements or assertions requires no equipment. Also, students criticised current textbooks that did not provide ideas on how to use active or collaborative approaches, nor did the textbooks offer practical examples or worksheets for implementation. This, therefore, resulted in an even heavier workload for educators.

Student teachers' own passivity. Three categories of obstacles, mentioned in the Finnish study by Niemi (2002), were also found in Turkish data. These were as follows: students' passive learning culture, lack of motivation and initiative, and lack of self-confidence. The first category (and the most common obstacle) was the students' passive learning culture to which they had become accustomed. Listening to a lecture was not only a more familiar role for students, it was also a considerably easier one. Some of them would still like to continue this tradition in university studies, too. The second category was the lack of motivation and initiative. Some students lacked the motivation to develop themselves, did not take responsibility for their own learning or did not want to move away from their comfort zone because they had gotten used to sitting passively in class. The third-largest category was not having enough self-confidence. Students made many critical comments, such as the following:

'We were raised with a tradition of behavioral training model through our entire educational life, so it is easy to continue this tradition at the university', 'participation in these activities is childish', 'the fear of criticism', 'fear of speaking in front of the class' and 'being shy'.

Examination system. Another barrier mentioned by almost all students was that the Turkish educational system was based on examinations. Turkey has standardised examinations for evaluating students at all levels. Placing students in high schools and universities or becoming a teacher is based on the score that the candidates receive in nationwide standardised examinations. Getting a high score in these tests generally requires memorised information. There is a general preference for students to work directly on multiple-choice questions while preparing for these exams. For this reason, students mentioned that when they started their career as teachers, they did not believe they would use these innovative methods in their class because of the examination system and students' and parents' expectations. From this point of view, we can conclude that teacher education and the evaluation system contradict each other.

How Can Students be Trained and Supported to Meet the Challenges They Face?

In the current study, the students' suggestions for further development and the results indicated that student teachers expected to be involved in the learning process as active participants. The students suggested that educators should be qualified and be models by applying active learning in their classes. The five main categories of suggestions are given in Table 4:

More applications should be carried out in courses
Practical teaching course should be given more semesters
A constructivist approach should be applied in the teacher-education program
The teacher education program should include research-based practices
Educators should be qualified and be models by applying active learning

Table 4: The suggestions made by student teachers for active learning in qualitative analysis

More applications should be carried out. Most students suggested having more practical courses instead of theoretical courses during TE. Also, they complained that the theoretical and practical courses were completely separated from each other, that active learning methods were implemented in only a few courses and that in the theoretical lessons, innovative teaching methods had not been used. Student teachers mentioned that if the student teachers were actively involved in the active learning implementation during the pre-service education process, it would be easier to transfer this experience in the future to their lessons.

Practical teaching courses should cover more semesters. Practical Teaching Courses in Turkey have been allocated in two semesters, namely, the School Experience course and the Teaching Practice course. The School Experience course is mostly based on the observation and recognition of a class and school environment by student teachers. Teaching Practice courses are mostly aimed at gaining teaching skills. However, student teachers suggested that these courses should be conducted more effectively and cover more semesters.

A constructivist approach should be applied in the TE program. Since no educational model can produce better results than the quality of the human resources who run it, the pre-service and in-service teachers' education process has become the key to the quality of the educational activities in schools. TE should provide all students with a core of professional competencies upon which they can build throughout their career.

The TE program should include research-based practices. Most students mentioned that educators should guide them in the research-oriented aspects of their education. TE should be based on a strong research component to educate students to be critical-knowledge creators. Students should learn to read educational research reports, to acquire data, to analyse them and make conclusions. The objective of research-based practices should be to train students to find and analyse problems they may expect to face in their future work.

Educators should be qualified and be models. Some students emphasised that educators should be models by applying these innovative teaching methods in their lectures. It seems to be rare that educators encourage them to apply these methods. The reform of instructional practice in higher education must begin with faculty members. Educators should share the responsibility of helping pre-service and in-service teachers to understand these concepts and to apply them successfully in their classrooms.

Discussion

Definitions and Experiences of Active Learning

The results clearly indicated that, in this one University at least, the TE department has the key role in the effectiveness of many educational reforms. Nevertheless, it would appear that the department responsible for preparing the pre-service teachers who contributed to this study, has been slow in responding. The results of this current study are very much in line with that which was conducted in Finland (Niemi, 2002). Both studies revealed that students from two culturally different educational settings defined active learning as a part of their professional development. Niemi (2002) stated that learning which demands active reflection and high responsibility gets the students to overcome their own limits. Active learning in TE is not only a method but also a concept of the teaching profession that is very rewarding for students. Also, in both the current study and that of Niemi (2002), it was found that active learning methods were implemented by only a few educators and mainly with fairly closed tasks. Open-learning environments, which require students' own initiative, planning, experimentation, elaboration and self-evaluation, still seemed to be rare.

In the current study, students also stressed that they enjoyed themselves and believed that they were very active learners when they had the freedom to design their lesson plans, give a lecture, and feel and act like a teacher. It can be concluded that students felt active when they directly participated in the learning process in which they preferred a view of active learning that implicitly acknowledged the behavioural, cognitive and social dimensions. Thus, the findings of this study correspond to Bonwell and Eison's (1991) definitions and general characteristics commonly associated with the use of strategies promoting active learning in the classroom: students are involved in more than listening; less emphasis is placed on transmitting information and more on developing students' skills; students are involved in higher-order thinking (analysis, synthesis and evaluation); students engage in activities (e.g., reading, discussing and writing); and greater emphasis is placed on students' exploration of their own attitudes and values.

In this study, the three dimensions of active learning outlined by students — behavioural, cognitive and social — were also evidenced by Watkins, Carnell, and Lodge (2007) and are more frequently found in the literature in various combinations rather than alone. Kane (2004), for example, alluded to both behavioural and cognitive elements in his description of active learning as fostering autonomous learners to think critically and take responsibility for their own learning, and to teachers providing more 'open-ended activities' to promote a less passive view of education. Skinner (2010) maintained that there were three dimensions of active learning, namely, active engagement in learning (but not necessarily on a physical level), experiential learning and cognitive engagement exhibited through choice and direction of learning (Drew & Mackie, 2011).

Furthermore in the current study, working as a group was also seen as an important active-learning experience. These findings are consistent with the finding of Machemer and Crawford (2007, p.10). They take a broad view, proposing that active learning is 'anything that is more than passive listening', and they, too, emphasised the social dimension so that while active learning is 'doing', and co-operative learning is 'doing with others'. In contrast to Machemer and Crawford (2007), however, Bonwell and Eison (1991) asserted that active learning is more than just listening and emphasised the development of higher-order thinking skills, such as analysis, synthesis and evaluation.

Facing the Challenges

The results of the current study clearly indicated that there is a big gap between the formal and applied curricula in the Faculty of Education. It is clear from the findings of this study, as well as from other studies on curricula changes which have been noticed in Turkey since the 1990s (Dundar & Lewis, 1999; Grossman, Onkol, & Sands, 2007; Aksit, 2007; Grossman & Sand, 2008; Grossman, Sands, & Brittingham, 2010), that the implementation of many well-intended reforms has been inefficient because the radical changes and reform have not been transferred effectively into the TE culture in Turkey. Whether a change is curricular or structural, or initiated internally or externally, there is no guarantee that practice follows a policy (Hopkins & Levin, 2000). The rate of adoption of any change will not only depend on what the changes are and how they are presented, but also on how they are perceived by the main stakeholders. Therefore, it is essential to examine the perceptions of the users and consider various contextual factors (Aksit, 2007).

Also, according to Bates and Townsend (2007), it is quite difficult to change the culture of TE. Teachers are not seen only those who implement of a curriculum according to the guidelines of the administration but also as subjects and researchers of educational research. Teachers should have a more active role as developers of teaching, and they are also seen as being more responsible for the development of their own profession in a larger sense (Niemi & Kohonen, 1995). TE culture should provide more active learning experiences to prepare teachers to use new methods with their students in schools. Thus, educators of teachers become key to the success of reform. These educators should be highly qualified and must be well prepared, especially in improving the quality of education that faces global challenges.

In the current study, among the common barriers to the current curriculum reform was the resistance to change; for example, the powerful influence of educational tradition was an important reason for criticising educators. Pellert (2009) discussed the need to overcome such resistance by implementing a new approach in a Higher Education Institution. Also, Pellert viewed the issue of change as being controlled more from the top down by the management of Higher Education Institutions trying to implement change within its respective institutions. In fact, many studies found the resistance to change to be the greatest barrier of all (Bonwell & Eison 1991; Niemi, 2002; Snyder, 2003; Grossman et al., 2007; Pundak & Rozner, 2008).

Whilst the student-centred learning approach is a highly pedagogical matter and can and should be implemented by individual educators in their respective classrooms, the institutional shift towards student-centred learning needs to be organised, consistent and transparent. For educators in higher education, a shift towards an student-centred learning approach, and maintaining this approach over time, is by no means a simple task. Where teachers are used to working in a teacher-centred environment, at first it is difficult for them, as well as for students, 'to challenge their taken-for-granted assumptions' (Diekelmann & Lampe, 2004; Heise & Himes, 2010, p.20). The student-centred learning approach involves an ongoing reflexive process for educators, in which they are engaged in 'thinking about their thinking', in order to improve their conventional pedagogy and delineating how they teach (Diekelmann & Lampe, 2004, p.245).

Shifting Perceptions of the Role of the Teacher and the Student

In this study, although student teachers experienced active learning during their TE program, they strongly criticised their education. The main reason for their criticism was

incompetent educators who were powerfully influenced by traditional educational methods. According to the study's findings, the other barrier was the shift in the perception of the roles of the teacher and student. This shift in conflicts with a dimension of the teacher's professional identity of being responsible for the transmission of knowledge. The teacher's role of transmitting knowledge is an idea still pervasive in educational discourse, despite current commitments to constructivism (Beijaard, Verloop, & Vermunt, 2000). Moreover, active learning is potentially problematic for educators because it appears to put them in a teaching role that is more at the side-lines and not at the centre that they are accustomed to occupying. Although they are central to negotiating and enacting active learning spaces, educators no longer hold centre stage. This shift in roles is recognised as increasing the challenge for teachers because they are expected to demonstrate expertise in their roles as 'motivator, diagnostician, guide, innovator, experimenter, researcher, modeller, mentor, and collaborator' (Drew & Mackie, 2011, p.13). However, Kaya (2009) and Yilmaz (2009) found this concept too alien for Turkish teachers who continue to view themselves as the main agents of teaching and the primary transmitters of knowledge in the classroom. Yet most Turkish teachers still provide students with almost no choices, no shared responsibilities, no collective decision-making powers nor opportunities to discuss current controversial and societal issues. It is not easy for Turkish teachers, who are used to teaching in an authoritative manner, to embrace the change in power structure by agreeing to transfer authority and responsibility to their students (Kaya, 2009, p.17). Similarly, Guthrie (2011) and Schweisfurth (2013) mentioned that Learner Centered Education (LCE) is ultimately a Western construct inappropriate for application in all societies and classrooms. Schweisfurth (2011) pointed out that LCE is a particularly demanding change, because of the profound shifts required in teacher-learner power relations and the nature of a teacher's professional learning. Teachers' attitudes and practices are shaped by multiple, complex factors, ranging from their cultural contexts, their own learning experiences, pre- and in-service education, and on-the-job experiences. Culture shapes all of these phenomena and interacts profoundly with teacher-learner relationships and classroom behavioural norms. Some cultures have greater 'power distance' between those with less and those with more power in a society, such as teachers and students; it is alien in such countries for a student to have a close and familiar relationship with a teacher or to question his or her wisdom.

Aksoy and Gozutok (2014), Haser and Star (2009) and Yilmaz (2009) found that Turkish TE is rarely learner-centred. Also Isikoglu, Basturk and Karaca (2009) stated that in-service teachers were unaware of appropriate student-centered teaching strategies. The education system, from the elementary school level to the university undergraduate level, is coloured by a rigidity that is not conducive to learner-centred education in Turkey. Thus, the system does not provide suitable models upon which fledgling teachers can base their practice. Similarly, in the current study, student teachers mentioned that active learning methods were implemented in only a few courses and most courses were instructor-centred. Interestingly, student teachers did not mention who determined the content, the schedule, the conditions for learning, the attendance policies and the evaluation process (e.g., Wright, 2011; Weimer, 2002). In conclusion, the meaning and application of active learning (student-centred learning) varied from educator to educator. Therefore, educators should be aware of the problem and could look to the five areas identified by Weimer (2002), where teacher-centeredness in the classroom was clearly seen: the balance of power; the function of content; the role of the teacher; the responsibility of learning; and the purpose and processes of evaluation. In this study, student teachers also complained about their peers, who preferred their accustomed passive role in class instead of taking charge or control, being involved and becoming more autonomous (e.g., Bonwell & Eison, 1991; Gavalcova, 2008; Michael 2006; Kirkwood, 2005). This notion of the active learner as pro-active, self-motivated, self-

regulated, independent, responsible and reflective is a recurring theme (Niemi, 2002; Zion & Slezak, 2005).

The results of the current study also parallel those of a study conducted in Finland (Niemi, 2002) about obstacles to active learning in TE. In both studies student teachers emphasised such obstacles: teaching methods which make students passive; incompetent educators of teachers; time; stress; separation of theoretical and practical studies; and students' passivity and lack of metacognitive skills. Since Finland does not have a standardised assessment for evaluating students or student teachers, the *examination system* was identified as a great barrier by Turkish students only. Furthermore, Aksoy and Gozutok (2014) noted that in Turkey, there are major differences between life in schools and education in TE because of national examinations. Similarly, in this study, most students mentioned that when they started their career as teachers, they did not believe they would use these innovative methods in their classes because of the examination system. Similarly, Schweisfurth (2011, 2013) found that a classic and recurrent policy contradiction was to promote LCE pedagogy in situations where high-stakes examinations, which test fixed knowledge, drove teacher, student and parent motivation. As a student, if your future education and career depend on examination results, the open-ended exploration of content not likely to be tested will seem like a luxury, and teachers will teach to examinations to meet students' needs and to protect their own reputations. Another barrier to change is that educators are neither sufficiently educated nor trained to use LCE.

In this study having a large class has been found as another obstacle by student teachers. Altinyelken (2011) reported that educators of such classes tend to adopt low-level teaching strategies, such as lecturing, because as they think that they would not have enough time to monitor and guide all students if they engaged in student-centred teaching and learning methods. Also, most students complained that the theoretical and practical courses were completely separated from each other, that active learning methods were implemented only in a few courses and that in the theoretical lessons, innovative teaching methods had not been used. One of the paper's finding that is worthy of attention is that there is a big gap between the formal and applied curricula in the Faculty of Education. Grossman et al. (2007) pointed out that the participation of educators of teachers was important in maintaining and institutionalising reform.

Finally, as Bonwell and Eison (1991) also stated, the biggest and longest-lasting reform of undergraduate education will come when individual faculties or small groups of instructors adopt the view of themselves as reformers within their immediate sphere of influence, namely, in the classes they teach every day. One way faculty members can begin to reform undergraduate education is through the use of strategies promoting active learning in the classroom. To do so successfully, each must personally confront the issue of taking risks. Most important, low-risk interactive strategies enable faculty members to develop experience in and have success with new techniques because of the educational reform and the quality of the educational activities in schools. The quality of an educational system cannot exceed the quality of its teachers; the pre-service and in-service teachers' education processes become the keys to success. Hence, the necessity to make improvements in teacher preparation is a current issue. Educators need to be highly qualified and well prepared, especially in improving the quality of education.

Conclusion

In conclusion, teacher educators play a crucial role in supporting the learning experience of student teachers. They are the key players in how educational systems evolve and in the implementation of the reforms. Educators should be equipped to respond to the evolving challenges of the current reform, to participate actively in it and to prepare student teachers to be autonomous, lifelong learners. The teacher educator should, therefore, be able to reflect on the processes of learning and teaching through an ongoing engagement with knowledge of the subject, curriculum content, pedagogy, innovation, research, and the social and cultural dimensions of education.

In teacher education, active learning is a tool that can be used by educators to reshape their own applications in addition to supporting the progress of pre-service teachers. Active learning helps educators modify their traditional roles and encourages them to conduct more student-centred applications. If a program is grounded in, or moving toward, a constructivist paradigm, active learning could be a valuable tool for helping educators construct knowledge about teaching and learning.

References

- Aksit, N. (2007). Educational reform in Turkey. *International Journal of Educational Development*, 27, 129–137. <http://dx.doi.org/10.1016/j.ijedudev.2006.07.011>
- Aksoy, E. & Gozutok, D. (2014). Amerika Birleşik Devletleri, Finlandiya, Singapur ve Türkiye’de Öğretmen Eğitimindeki Dönüşümler. *Eğitim Bilimleri ve Uygulama*, 13 (25), 23-46.
- Altinyelken, H. K. (2011). Student-centred pedagogy in Turkey: Conceptualisations, interpretations and practices. *Journal of Education Policy*, 26(2), 137 – 160. <http://dx.doi.org/10.1080/02680939.2010.504886>
- Bates, R. & Townsend, T. (2007). The Future of Teacher Education: Challenges and Opportunities. Townsend, T. & Bates, R. (Eds.). *Handbook of Teacher Education: Globalization, standards and professionalism in times of change*. P.O. Box 17, 3300 AA Dordrecht, the Netherlands. www.springer.com
- Beijaard, D., N. Verloop, and Vermunt, J.D. (2000). Teachers' perceptions of professional identity: An exploratory study from a personal knowledge perspective. *Teaching and Teacher Education* 16, no. 7: 749-764. [http://dx.doi.org/10.1016/S0742-051X\(00\)00023-8](http://dx.doi.org/10.1016/S0742-051X(00)00023-8)
- Bonwell, C., & Eison, J. (1991). *Active learning: Creating excitement in the classroom*, Washington DC: ERIC Digest. Retrieved from: https://www.ydae.purdue.edu/lct/HBCU/documents/Active_Learning_Creating_Excitement_in_the_Classroom.pdf [Accessed 10.05.2015]
- Deikelmann, N. and Lampe S. (2004) ‘Student-Centered Pedagogies: CoCreating Compelling Experiences Using the New Pedagogies’. In: *Teacher Talk: New Pedagogies for Nursing*
- Drew, V., & Mackie, L. (2011). Extending the constructs of active learning: implications for teachers’ pedagogy and practice, *The Curriculum Journal*, 22 (4), 451-467. <http://dx.doi.org/10.1080/09585176.2011.627204>
- Dundar, H., Lewis, D., (1999). Equity, quality and efficiency: effects of reform in Turkish higher education. *Higher Education Policy* 12, 343–346. [http://dx.doi.org/10.1016/S0952-8733\(99\)00016-1](http://dx.doi.org/10.1016/S0952-8733(99)00016-1)

- Gavalcova, T. (2008). On strategies contributing to active learning. *Teaching Mathematics And Its Applications* 27, no.3: 116-122. <http://dx.doi.org/10.1093/teamat/hrn013>
- Grossman, G. M., & Sands, M. K. (2008). Restructuring reforms in Turkish teacher education: Modernisation and development in dynamic environment. *International Journal of Educational Development*, 28, 70–80. <http://dx.doi.org/10.1016/j.ijedudev.2007.07.005>
- Grossman, G. M., Sands, M. K. & Brittingham, B. (2010). Teacher education accreditation in Turkey: The creation of a culture of quality. *International Journal of Educational Development* 30, 102–109 <http://dx.doi.org/10.1016/j.ijedudev.2009.08.003>
- Grossman, G.M., Onkol, P.E., Sands, M. (2007). Curriculum reform in Turkish teacher education: attitudes of teacher educators towards modernization in an EU candidate nation. *International Journal of Educational Development* 27, 138–150. <http://dx.doi.org/10.1016/j.ijedudev.2006.07.005>
- Guthrie, G. (2011). The Progressive Fallacy in Developing Countries: In favour of formalism.
- Haser, C and Star, R.J. (2009). Change in beliefs after first-year of teaching: The case of Turkish national curriculum context, *International Journal of Educational Development* 29(3), 293-302. <http://dx.doi.org/10.1016/j.ijedudev.2008.08.007>
- Heise, B. and Himes D. (2010) ‘The Course Council: An Example of Student-Centered Learning’. In: Educational Innovation, Advanced Online Release , 29 January 2010, pp.1-3 <http://dx.doi.org/10.3928/01484834-20100115-04>
- Isikoglu, N, Basturk, R & Karaca, F (2009). Assessing in-service teachers' instructional beliefs about student-centred education: A Turkish perspective. *Teaching and Teacher Education*, 25:350-356. <http://dx.doi.org/10.1016/j.tate.2008.08.004>
- Kane, L. (2004). Educators, learners and active learning methodologies, *International Journal of Lifelong Education*, 23:3, 275-286, <http://dx.doi.org/10.1080/0260/37042000229237>
- Kaya, Y. (2009). Democracy through learner-centered education: A Turkish perspective. *International Review Of Education*. 55:21–37 <http://dx.doi.org/10.1007/s11159-008-9112-1>
- Kimonen, E. & Nevalainen, R. (2005). Active learning in the process of educational change, *Teaching and Teacher Education* 2, 623–635 <http://dx.doi.org/10.1016/j.tate.2005.05.003>
- Kirkwood, M. 2005. *Learning to think: Thinking to learn*. Paisley: Hodder Gibson.
- Laroche, N. Bednarz, & J. Garrison (Eds.). (1998). *Constructivism and education*. Cambridge: Cambridge Press.
- Kohlbacher, F. (2006). The Use of Qualitative Content Analysis in Case Study Research.7 (1), 21. <http://www.qualitative-research.net/index.php/fqs/article/view/75/153>(Accessed 07.07.2015).
- Kohonen, V. (2002). Student autonomy and the teacher' professional growth: fostering collegial culture in language teacher education. http://www.script.men.lu/activinno/portfolio/kohonen_student_autonomy.pdf(Accessed 02.06.2015)
- Darling-Hammond, L. (2000). How teacher education matters. *Journal of Teacher Education*, 51 (3), 166-173 <http://dx.doi.org/10.1177/0022487100051003002>
- Machemer, P.L. & Crawford, P. (2007). Student perceptions of active learning in a large crossdisciplinary classroom. *Active Learning in Higher Education* 8, no. 1: 9-30. <http://dx.doi.org/10.1177/1469787407074008>
- Michael, J. (2006). Where's the evidence that active learning works? *Advances in Physiology Education* 30: 135-167.

- Pellert, A. (2009). Organisational Development and Promoting Change: the Deeper Dimensions of the Bologna Process. *EUA Bologna Handbook: Making Bologna Work*, C.1.7-1, pp.1-20
- Prince, M. (2004). Does active learning work? A Review of the Research. *Journal of Engineering Education*, 93(3), 223-231 <http://dx.doi.org/10.1002/j.2168-9830.2004.tb00809.x>
- Pundak, D., & Rozner, S. (2008). Empowering engineering college staff to adopt active learning methods. *Journal of Science Education and Technology* 17(2), 152-163. <http://dx.doi.org/10.1007/s10956-007-9057-3>
- Rotgans & Schmidt Henk G. (2011). The role of teachers in facilitating situational interest in an active-learning classroom. *Teaching and Teacher Education* 27, 37-42 <http://dx.doi.org/10.1016/j.tate.2010.06.025>
- Schweisfurth, M.(2011). Learner-centred education in developing country contexts: From solution to problem? *International Journal of Educational Development* 31, 425–432 <http://dx.doi.org/10.1016/j.ijedudev.2011.03.005>
- Schweisfurth, M.(2013). Learner-centred education in international perspective, *Journal of International and Comparative Education*, 2(1), 1-7 <http://dx.doi.org/10.14425/00.45.70>
- Niemi, H. (2002). Active learning—a cultural change needed in teacher education and schools. *Teaching and Teacher Education* 18, 763–780 [http://dx.doi.org/10.1016/S0742-051X\(02\)00042-2](http://dx.doi.org/10.1016/S0742-051X(02)00042-2)
- Niemi, H., & Nevgi, A. (2014). Research studies and active learning promoting professional competences in Finnish teacher education, *Teaching and Teacher Education*, (43), 131-142 <http://dx.doi.org/10.1016/j.tate.2014.07.006>
- Skinner, D. (2010). Effective learning and teaching in practice, London: Continuum.
- Snyder, K.D. 2003. Ropes, Poles, and Space: Active Learning in Business Education, *Active Learning in Higher Education* 4, no. 2: 159-167. <http://dx.doi.org/10.1177/1469787403004002004>
- Watkins, C., Carnell, E. & Lodge, C. (2007). *Effective learning in classrooms*, London: Sage. <http://dx.doi.org/10.4135/9781446211472>
- Weimer, M. (2002). *Learner-centered teaching: Five key changes to practice*. San Francisco, CA: Jossey-Bass.
- Wright, B. G. (2011). Student-Centered Learning in Higher Education, *International Journal of Teaching and Learning in Higher Education* 23 (3), 92-97
- Yilmaz, K. (2009). Democracy through learner-centred education: A Turkish perspective. *International Review of Education*, 55, 21-37. <http://dx.doi.org/10.1007/s11159-008-9112-1>
- Zion, M. & Slezak, M. (2005). It takes two to tango: In dynamic inquiry, the self-directed student acts in association with the facilitating teacher. *Teaching and Teacher Education* 21, no.7: 875 – 894. <http://dx.doi.org/10.1016/j.tate.2005.05.016>

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